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22 Apr 64

JWC
Dear John:

During my recent visit to your area, [] requested additional information on the Goldberg Step and Repeat Printer for evaluation of PAR 207-A. STAT

The only information available is the specification prepared at the time of design and fabrication of the printer. For your information, repeated tests confirm capability of the printer to accomplish reproduction at 300 lines per millimeter. It is believed that this printer will prove to be an excellent test vehicle in accomplishing the Phase I investigation of PAR 207-A.

Don't hesitate to contact me if I can be of any further service to you or any of your engineers.

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Declass Review by NGA.

10/23/62

Specification

"Goldberg"
Step and Repeat Printer
with
Exposure Control

Mission: Contact print negative or positive black and white material, standard or thin base in widths 70mm to 9 $\frac{1}{2}$ -inches and lengths up to 18-inches maximum.

Printing Method: Step and Repeat, Flat Bed, Air Bag hold down.

Capacity: 1000 foot rolls of standard base material on standard AF spools.

Resolution: 300 lines/millimeter on center 200 lines/millimeter AWA. Air bag hold down.

Printing Speed : One print every eight seconds on lengths to 9 $\frac{1}{2}$ -inches. One print every fifteen seconds for 18-inch format.

Power: Three wire, 110 volt, 60 cycle, 1 phase, 1000 watts, 75 psi factory air.

Dimensions: 56" wide x 34" deep x 72" high - 400 pounds.

Drive: All supply and takeup spindles powered by Torque Motors. Raw stock advance powered by Bodine Reducer motor and geared Geneva drive. Shutter powered by Bodine Reducer motor. Raw stock advance altered by change gears. Negative advance manual or torque motor slew. Platen raised and lowered by air cylinder.

Printing Lamp: Two - 100 watt Mercury Arc (3200 to 4000 A) located 36-inches from platen for minimum fall off and maximum resolution.

Filters: Automatic, operating from punched paper tape or push button.
Three Filters provided, allowing density inserts in steps of .2

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from 0 to 1.4 density. Other filters can be provided permitting eight density steps in any desired increment.

Shutter: Manual setting 1/8 sec. to one sec. exposure times. Repeatability 1%.

Masks: Masks provided for 9 x 9 format and 9 x 18 format. Blanks supplied for other formats.

Controls: Main Breaker.

Print Button.

4 Variacs for Torque Motor Control.

Preset counter for automatically running a number of prints of a given negative.

Push buttons for density inserts.

Automatic pressure control for air bag.

Printing lamp out of control pilot light.

Frame number display lamp.

Interlocks: Cycle automatic, controlled by print button or preset counter.

Manual exposure buttons override tape input.

Tape reader advance interlocked out when operating from preset counter.

Safety Guard provided for operator protection deactivates printer.

Safe Light: Filtered safelight located under glass aperture plate.

Construction: Heavy duty welded steel framework supporting platen, aperture plate and all drive mechanism. Natural finished removable plywood inserts enclose cabinet and provide light tight construction.

Finish: Hammertone gray and natural birch plywood face. Interior matte black.

Auxiliary Equipment: A specially adapted Friden Add Punch and Friden Tape Reader can be supplied for the purpose of making tape and scheduling various densities for consecutive prints. Punched tape carries an identifying frame

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number, the last digit of which is displayed on the printer control panel and also carries the density schedule to be used in printing. Density inserts are controlled automatically but may be overridden by the manual density insert buttons. Add Punch also produces a print out for checking tape inputs. Tape code is standard and may be reproduced or corrected with print out on any standard Flexowriter.